



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,655	02/05/2004	Yun Luo	TRW(TE)6894	6238
26294	7590	12/30/2008	EXAMINER	
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 1300 EAST NINTH STREET, SUITE 1700 CLEVEVLAND, OH 44114			FUJITA, KATRINA R	
			ART UNIT	PAPER NUMBER
			2624	
			MAIL DATE	DELIVERY MODE
			12/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Attachment to Advisory Action Paper No. 20081222

Summary of Remarks (@ response page labeled 12): The cited motivation of Covell et al. "would not lead one of skill in the art to produce a three-dimensional grid pattern for the purposes of feature extraction".

Examiner's Response: The Examiner has provided sufficient support and motivation in the rejection as to why one of ordinary skill in the art would seek to utilize three-dimensional image information for the grid pattern. As three-dimensional images may provide depth information, the reliability of feature extraction increases by incorporating them into the system of Murphey et al.

Summary of Remarks (@ response page labeled 13): One of ordinary skill in the art "would not expend the additional resources necessary to produce disparity images, including the addition of extra hardware and more complex image processing algorithms".

Examiner's Response: As the Examiner has established the benefits of utilizing three-dimensional images with depth data in the system, it only follows that the system is modified such that an appropriate source of the three-dimensional images is included as well, which is provided by the Krumm reference. As such, the vision system would not be viewed as "extra hardware". While the image processing algorithms would be

more complex, it only follows that a modification from two-dimensional images to three-dimensional images would require more complex algorithms, motivation for which has already been established.

Summary of Remarks (@ response page labeled 14): Murphey et al. does not use curved surfaces in constructing a grid pattern.

Examiner's Response: As the Applicant has noted, the Examiner gave support for a particular definition of the word "curve" for purposes of examination. One will appreciate that a "curve" as defined for a surface in three-dimensional space is a curved surface. As the combination teaches a three-dimensional grid pattern, it follows that the grid contains intersecting surfaces in three-dimensions, or curved surfaces.

/Brian P. Werner/
Supervisory Patent Examiner, Art Unit 2624